

Town of Bridgeville

Water Service Rate Analysis Results and Recommendations

Prepared by: Thomas A. Matich
Circuit Rider 2
Delaware Rural Water Association



Introduction

This study intends to provide background, current status and recommendations for the Town of Bridgeville's water systems regarding user rates and special connection charges.

During this study we:

- Reviewed operating revenues and expenses
- Compared rates to other utility providers
- Reviewed rate design methods
- Made recommendations for rates and charges



Purpose and Goals

What factors contribute to the cost of tap water?

There are numerous factors that influence the cost of tap water. These include:

- **Aging water infrastructure** – To ensure reliable service, we need to prudently invest in upgrading aging water mains, facilities, wellfields, storage, etc.
- **Rising treatment costs** – New drinking water regulations are driving investment in new treatment technologies. As detection methods grow more sophisticated, more stringent water quality regulations may often result in increased testing and treatment costs.
- **Increasing costs of power** – It takes significant energy to pump, treat and deliver water to thousands of customers.



Purpose and Goals (continued)

- The Town recently adjusted the annual budget due to less annual revenue from the lost sewer system to the county
- The town must operate on a full cost recovery basis (i.e. water revenues must pay for the operation of the system)
- The Town has not had a water rate adjustment since 2010
- Fixed costs should be recovered through a fixed, per-user availability charge. Variable costs should be recovered through a usage charge
- The town will bill each user according to the water they use
- The town wants the rates to be fair and equitable for all
- The Town is currently progressing through a water meter replacement program



Water Rate History

- **March 1996**, Town Commissioners established new sewer and water rates and other Town fees. The service fee was set at \$7.00 per month regardless of amount of water used. (Ordinance No. 1695) (T1 \$1.49, T2 \$1.86, T3 \$2.24)
- **July 1, 2001**, Town Commissioners amended Ordinance No. 1695 water rates for a \$.30 increase per thousand gallons per month for all customers. (Ordinance No. 01-4) (T1 \$1.79, T2 \$2.16, T3 \$2.54)
- **August 2004**, service was dropped to \$3.50. This change was directly implemented in FY05 Budget. No ordinance approved.
- **June 2, 2008**, Town Commissioners approved a new water rate increase only for customers using more than 5000 gallons per month. (Ordinance No. A08-7) (T1 \$1.79, T2 \$2.35, T3 \$2.75)
- **July 19, 2010**, Town Commissioners approved \$1.00 water rate increase per thousand gallons per customer (Ordinance No. A10-5) (T1 \$2.79, T2 \$3.35, T3 \$3.75)
- **May 28, 2014**, Town Commissioners unanimously approved a motion for \$.97 increase per thousand gallons per month for all customers. This increase was never implemented. (Ordinance No. 14-3)
- **October 2014**, during a meeting where rates were discussed, the pre-2014 usage rates were readopted, with a service fee of \$7.50.
No ordinance approved
- The Town adjusted the 2022 annual budget due to less annual revenue from the lost sewer system to the county



Again - In Summary

Date	Ordinance	Base Rate	Tier 1 (Per 1000 Gallons)	Tier 1 (Per 1000 Gallons)	Tier 1 (Per 1000 Gallons)
March 1996	1695	\$7.00	\$1.49	\$1.86	\$2.24
July 1, 2001	01-4	\$7.00	\$1.79	\$2.16	\$2.54
August 2004	N/A	\$3.50	\$1.79	\$2.16	\$2.54
June 2, 2008	A08-7	\$3.50	\$1.79	\$2.35	\$2.75
July 19, 2010	A10-5	\$3.50	\$2.79	\$3.35	\$3.75
May 28, 2014	14-3	\$3.50	\$3.76	\$4.32	\$4.72
October 2014	N/A	\$7.50	\$2.79	\$3.35	\$3.75

Tier 1 – 1 to 5000 Gallons

Tier 2 – 5,001 to 10,000 Gallons

Tier 3 – Any usage over 10,000



Water Rate Analysis Background

- The rate analysis started at the end of January 2022.
- FY22 Budget revenues and expenses were analyzed
- Water production and usage were analyzed from FY19 - current
- Water loss between production and actual use was audited
- Water accounts were reconciled by location and type
- Financial information from the budget was entered into the spreadsheet as the basis for costs (FY22 and FY23 budgets used)
- Reserves were calculated as required by USDA and as recommended for full cost recovery rate setting
- The resulting costs were used to calculate the rates and rate structure necessary to fully recover costs of operation



Current Rate and Structure

- Service Fee – \$7.50 per month
- Usage Charge – \$2.79 per 1,000 gallons used (0-5,000 gallons)
\$3.35 per 1,000 gallons used (next 5,000 gallons)
\$3.75 per 1,000 gallons used (over 10,000 gallons)
- **Monthly water bill estimate @ 5000 gallons – \$21.45**
- Impact fees – Infill Residential \$750
Non-Infill Residential \$500

* An infill lot is an existing, undeveloped lot of record within the existing corporate limits of Bridgeville as of October 19, 2002. Each infill lot shall be entitled to one (1) EDU at the infill residential impact fee rate as may be amended from time to time by the Commissioners.



Tidewater comparison

- Facilities Charge – monthly fee based on meter size
 - $\frac{3}{4}$ " - \$18.20, 1" - \$30.33, 1 $\frac{1}{2}$ " - \$54.61, 2" - \$84.95, etc.
- Usage Charge – \$7.7248 per 1,000 gallons used (0-5,000 gallons)
\$7.8243 per 1,000 gallons used (5,001 – 20,000 gallons)
\$7.9252 per 1,000 gallons used (over 20,000 gallons)
- Public Fire Hydrant Charge - \$4.74 per month
- **Monthly water bill estimate @ 5000 gallons – \$61.56 (3/4" service)**
- Contribution In Aid of Construction (CIAC) Charge – based on service size
 - $\frac{3}{4}$ " - \$2,079.66, 1" - \$2,162.85, 2" - \$2,474.80, 4" - \$4,783.23, etc.



What does this mean?

- Past budgets were balancing due to revenues from growth (Heritage Shores meter pits, connection fees, etc.) and splitting sewer system revenue with the water department
- Any growth based revenue from the water department should be considered surplus for future maintenance or capital improvement
- Town no longer operates or receives revenue from sewer operations. Town must recover for sewer revenue that was being used to balance water budget.
- We must ensure water revenues can cover expenses of water operations, independently, for the next fiscal budget cycle



Water Rate Adjustment Options

- Increase monthly service fee
 - Revenue received from the monthly service fee should cover fixed annual costs
- Increase usage charge per 1000 gallons used
 - Variable costs should be recovered through the usage charge
- Adjust impact fees on new development to help fund and pay for maintenance of the system or other capital improvements
- Restructure rate based on meter size
- Review and adjust other possible miscellaneous charges
- A mix of some or all of the above



Current Rate vs. New Rate

(Slide added after study completion)

Current Rate

- Service Fee – \$7.50 per month - Secondary Meter \$5.50 per month
- Usage Charge – \$2.79 per 1,000 gallons used (0-5,000 gallons)
\$3.35 per 1,000 gallons used (next 5,000 gallons)
\$3.75 per 1,000 gallons used (over 10,000 gallons)
- **Monthly average water bill estimate @ 5000 gallons – \$21.45**

- No difference in rate between meter sizes = no difference for residential vs. commercial/industrial usage

NEW Rates

- Service Fee – \$15.00 per month – Standard Residential (3/4" meter)
\$10.00 per month – Secondary / Irrigation (3/4" meter)
- Usage Charge – \$3.76 per 1,000 gallons used (0-5,000 gallons)
\$4.32 per 1,000 gallons used (next 5,000 gallons)
\$4.72 per 1,000 gallons used (over 10,000 gallons)
- **Monthly average water bill estimate @ 5000 gallons – \$33.80**

- Creates Service Rates based on the proportional size of the meter connected (Distributes base cost fairly across larger users)

